

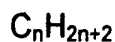
## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) ~~Process~~ A process for the manufacture of alkanes, ~~characterized in that it comprises, as main stage, a reaction resulting from bringing comprising reacting methane into contact~~ with at least one other starting alkane (A) in the presence of a catalyst based on a metal M capable of catalysing a metathesis of alkanes, which reaction causes cleavage and recombination reactions of the methane and the at least one other starting alkane (A) and results in the formation of at least one or two final alkanes alkane(s) (B) having a number of carbon atoms less than or equal to that of the at least one other starting alkane (A) and at least equal to 2.

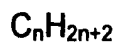
2. (Currently amended) ~~Process according to~~ The process of Claim 1, ~~characterized in that wherein the at least one other starting alkane (A) is chosen~~ selected from the group consisting of substituted or unsubstituted acyclic alkanes and substituted cyclic alkanes.

3. (Currently amended) ~~Process according to~~ The process of Claim 1 or 2, ~~characterized in that wherein the at least one other starting alkane (A) corresponds to the general formula~~



in which n is an integer ranging from 2 to 60.

4. (Currently amended) ~~Process according to~~ The process of Claim 1 or 2, ~~characterized in that wherein the at least one other starting alkane (A) is a cycloalkane which is substituted and which corresponds to the general formula~~



in which n is an integer ranging from 6 to 60.

5. (Currently amended) ~~Process according to any one~~ The process of Claims Claim 1 ~~[[to 3]]~~, characterized in that wherein the at least one other starting alkane (A) is ~~chosen~~ selected from the group consisting of propane, n-butane, isobutane, n-pentane, isopentane, n-hexane, n-octane, n-nonane and n-decane.

6. (Currently amended) ~~Process according to any one~~ The process of Claims Claim 1 ~~[[to 3]]~~, characterized in that wherein the at least one other starting alkane (A) is ~~chosen from a~~ C<sub>3</sub> to C<sub>17</sub> alkanes alkane.

7. (Currently amended) ~~Process according to any one~~ The process of Claims Claim 1 ~~[[to 3]]~~, characterized in that wherein the at least one other starting alkane (A) is ~~chosen from a~~ C<sub>18</sub> to C<sub>60</sub> paraffins paraffin.

8. (Currently amended) ~~Process according to any one~~ The process of Claims Claim 1 ~~[[to 7]]~~, characterized in that wherein the catalyst comprises is a hydride of a metal M grafted to and dispersed over a solid support.

9. (Currently amended) ~~Process according to~~ The process of Claim 8, characterized in that wherein the metal M is ~~chosen~~ selected from the group consisting of transition metals, lanthanides and actinides.

10. (Currently amended) ~~Process according to~~ The process of Claim 9, characterized in that wherein the metal M is ~~chosen~~ selected from the group consisting of titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum and tungsten.

11. (Currently amended) ~~Process according to any one~~ The process of Claims Claim 8 ~~[[to 10]]~~, characterized in that wherein the metal M is at an oxidation state lower than its maximum value.

12. (Currently amended) ~~Process according to any one~~ The process of ~~Claims Claim 8 [[to 11]], characterized in that~~ wherein the solid support is ~~chosen~~ selected from the group consisting of metal oxides ~~[[or]]~~ and refractory oxides.

13. (Currently amended) ~~Process according to~~ The process of Claim 12, ~~characterized in that~~ wherein the metal M is bonded to ~~one or, preferably, to at least two~~ an oxygen ~~[[atoms]]~~ atom of the solid support.

14. (Currently amended) ~~Process according to any one~~ The process of ~~Claims Claim 8 [[to 13]], characterized in that~~ wherein the catalyst is prepared in ~~two~~ stages by:

(a) ~~[[by]]~~ dispersing over and grafting to the solid support an organometallic precursor (P) comprising the metal M bonded to at least one hydrocarbon-comprising ligand, then

(b) ~~[[by]]~~ treating the solid product resulting from the ~~preceding stage (a)~~ with hydrogen or a reducing agent capable of forming a metal M-hydrogen bond.

15. (Currently amended) ~~Process according to any one~~ The process of ~~Claims Claim 1 [[to 14]], characterized in that~~ wherein the reaction resulting from ~~bringing between~~ methane ~~into contact with~~ and the at least ~~[[the]]~~ one other starting alkane (A) is carried out at a temperature of -30 to +400° under an absolute pressure of  $10^{-3}$  to 30 MPa.

16. (Currently amended) ~~Process according to any one~~ The process of ~~Claims Claim 1 [[to 15]], characterized in that~~ wherein the reaction resulting from ~~bringing between~~ methane ~~into contact with~~ and the at least ~~[[the]]~~ one other starting alkane (A) is carried out in the gas phase in a mechanically stirred and/or fluidized bed

reactor or in a stationary or circulating bed reactor, the bed being composed essentially of the catalyst.

17. (Currently amended) ~~Process according to any one~~ The process of ~~Claims Claim 1 [[to 15]], characterized in that wherein~~ the reaction resulting from bringing between methane into contact with and the at least ~~[[the]]~~ one other starting alkane (A) is carried out in the liquid phase, the catalyst being suspended in the liquid phase.

18. (Currently amended) ~~Process according to any one~~ The process of ~~Claims Claim 1 [[to 17]], characterized in that wherein~~ the methane and the at least one other starting alkane(s) alkane (A) are used in a (methane:starting alkane(s) alkane (A)) molar ratio ranging from 0.1:1 to 500:1.

19. (Currently amended) ~~Process according to any one~~ The process of ~~Claims Claim 1 [[to 18]], characterized in that wherein~~ the catalyst is present in ~~[[the]]~~ a reaction mixture composed of the methane and the at least ~~[[the]]~~ one other starting alkane (A) in a proportion such that the molar ratio of methane to the metal M of the catalyst is from 10:1 to 10<sup>5</sup>:1.

20. (Cancelled).

21. (New) The process of claim 12, wherein the metal M is bonded to at least two oxygen atoms of the solid support.